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FIG. 1

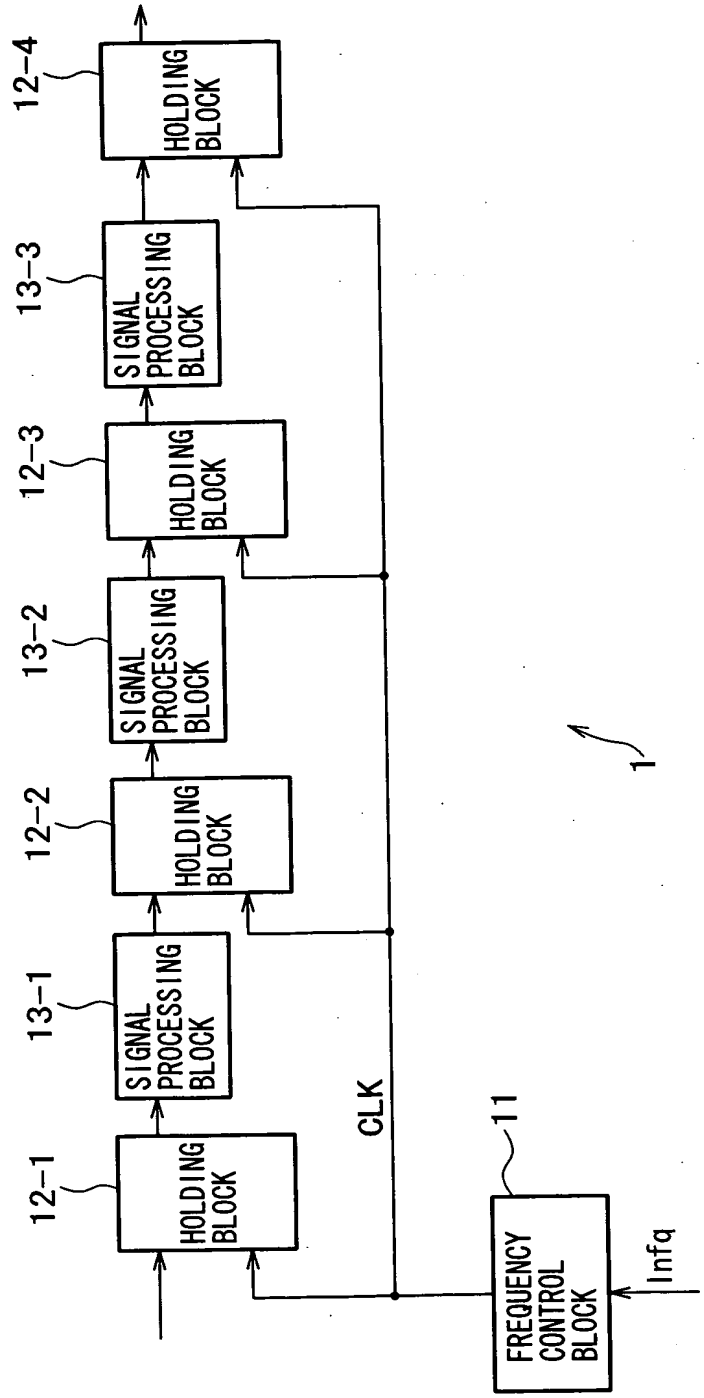

FIG. 2

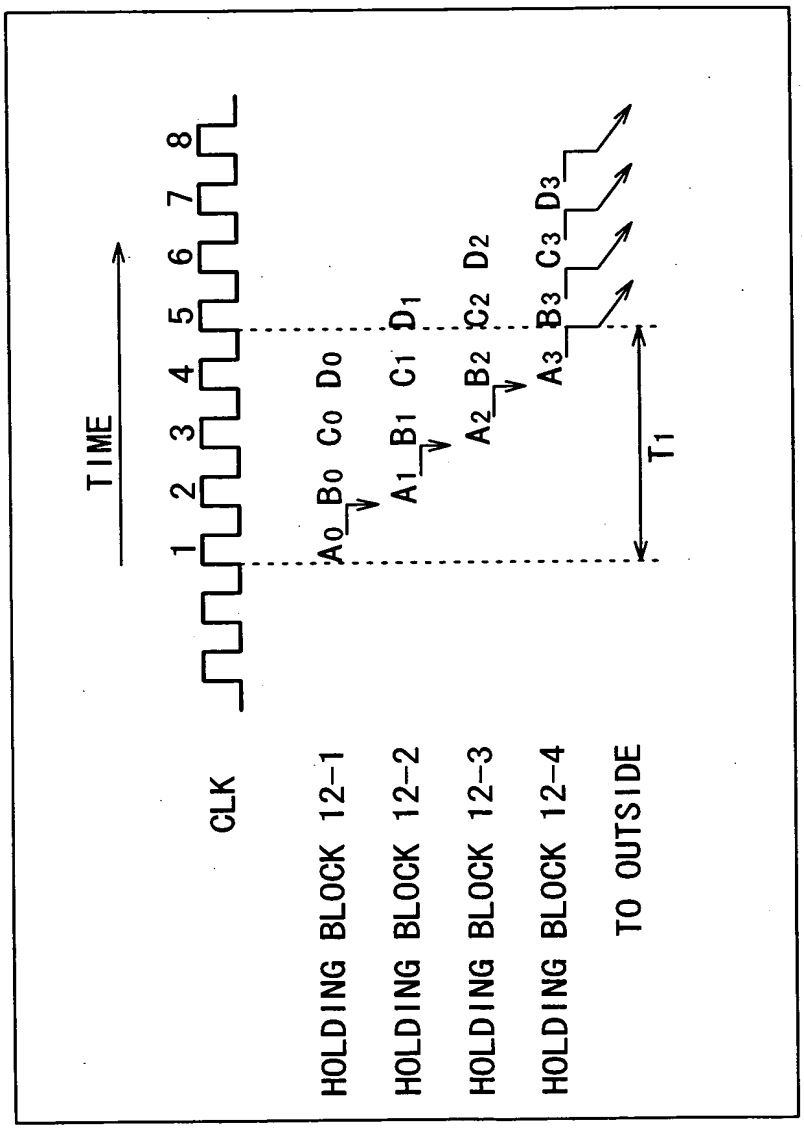
TIME
1
2
3
4
5
6
7
8
CLK
HOLDING BLOCK 12-1
HOLDING BLOCK 12-2
HOLDING BLOCK 12-3
HOLDING BLOCK 12-4
TO OUTSIDE
A0 B0 C0 D0
A1 B1 C1 D1
A2 B2 C2 D2
A3 B3 C3 D3
T1

FIG. 3

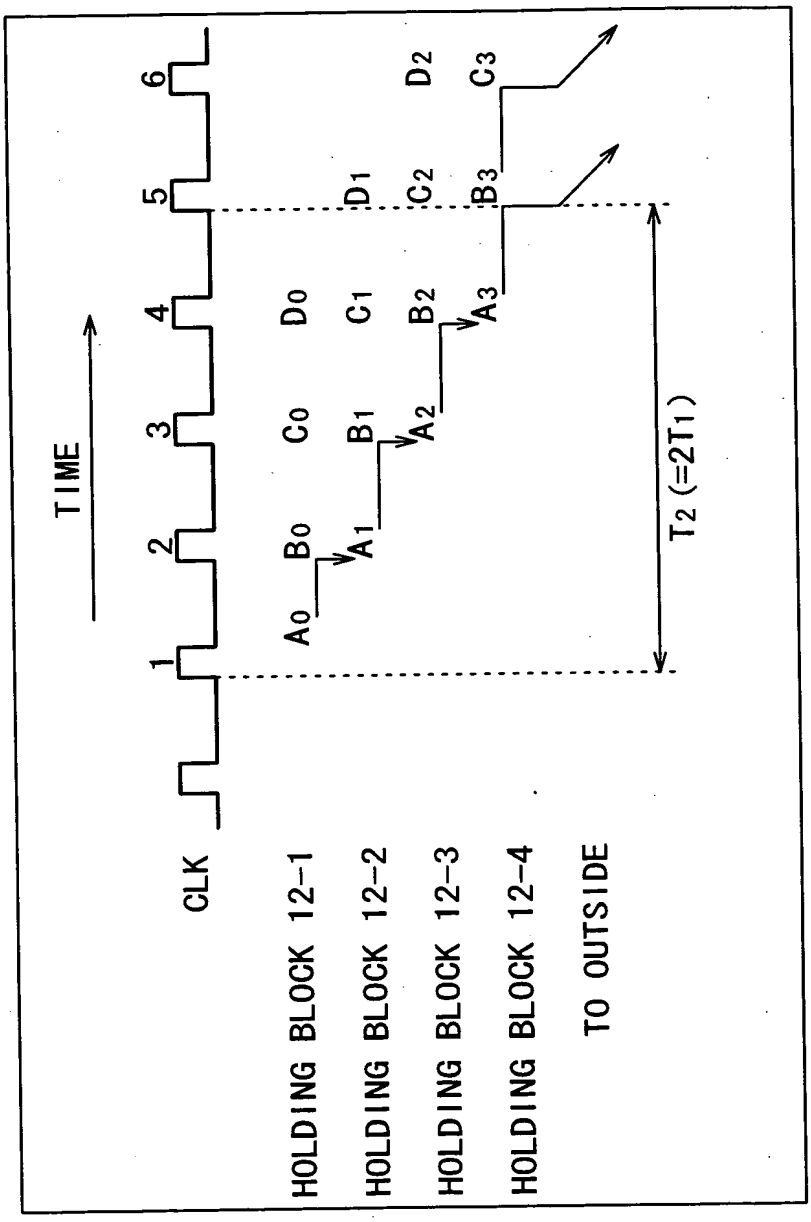
CLK
TIME
1
2
3
4
5
6
A0
B0
C0
D0
A1
B1
C1
D1
A2
B2
C2
A3
B3
C3
D2
T2 (=2T1)
HOLDING BLOCK 12-1
HOLDING BLOCK 12-2
HOLDING BLOCK 12-3
HOLDING BLOCK 12-4
TO OUTSIDE

FIG. 4

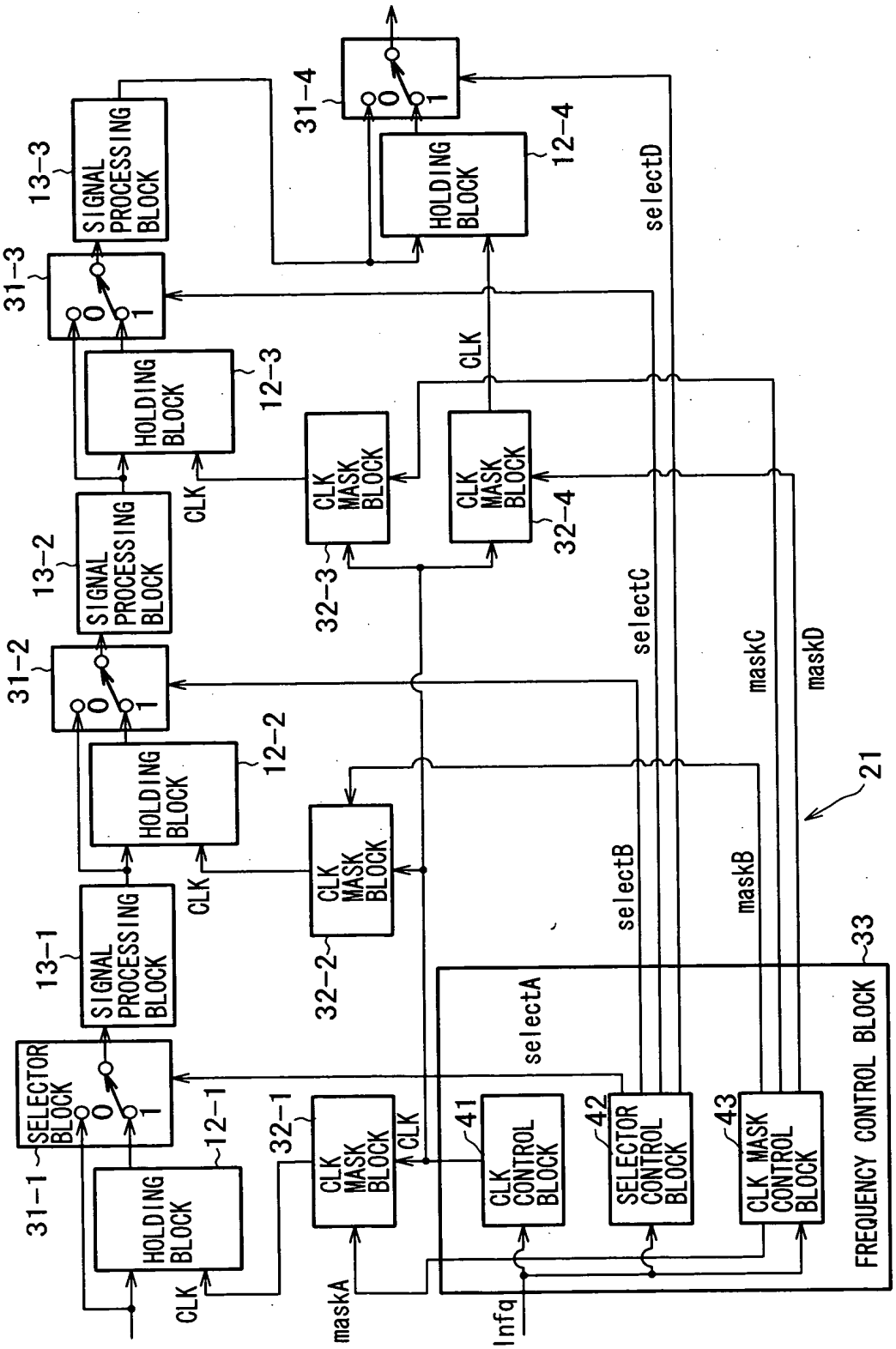
31-4
31-3
31-2
31-1
SELECTOR BLOCK
HOLDING BLOCK
12-4
12-3
12-2
12-1
SIGNAL PROCESSING BLOCK
13-3
13-2
13-1
CLK MASK BLOCK
32-4
32-3
32-2
32-1
CLK
selectA
selectB
selectC
selectD
maskA
maskB
maskC
maskD
Infq
41
CLK CONTROL BLOCK
42
SELECTOR CONTROL BLOCK
43
CLK MASK CONTROL BLOCK
33
FREQUENCY CONTROL BLOCK
21

FIG. 5

FREQUENCY INFORMATION infq	SYNCHRONIZING CLOCK SIGNAL CLK
00	10MHZ
01	33MHZ
10	50MHZ
11	100MHZ

FIG. 6

FREQUENCY INFORMATION infq	SYNCHRONIZING CLOCK SIGNAL CLK
10	10MHZ
3	33MHZ
2	50MHZ
1	100MHZ

FIG. 7

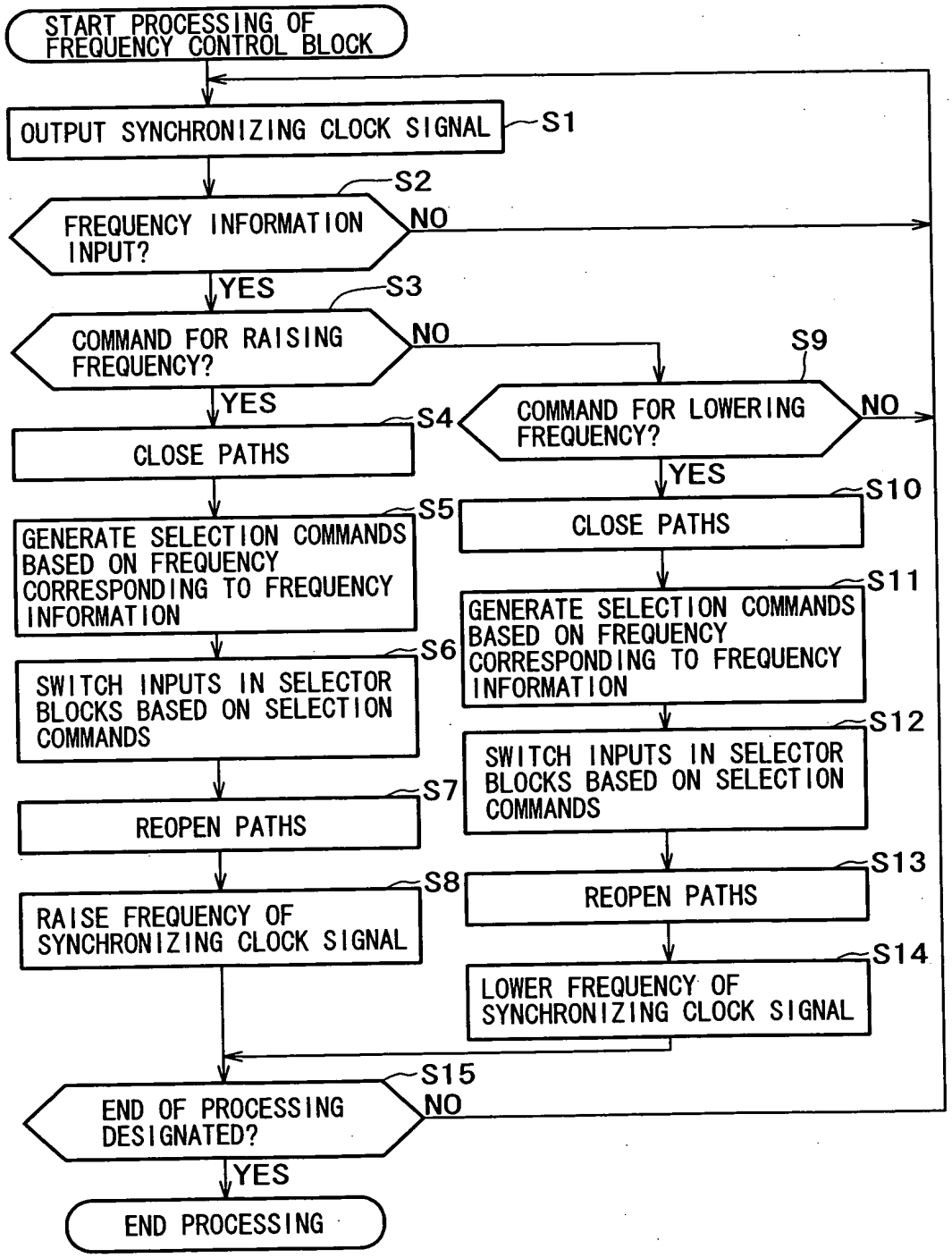
START PROCESSING OF FREQUENCY CONTROL BLOCK
OUTPUT SYNCHRONIZING CLOCK SIGNAL
S1
S2
FREQUENCY INFORMATION INPUT?
NO
YES
S3
COMMAND FOR RAISING FREQUENCY?
NO
S9
YES
S4
CLOSE PATHS
COMMAND FOR LOWERING FREQUENCY?
NO
YES
S5
GENERATE SELECTION COMMANDS BASED ON FREQUENCY CORRESPONDING TO FREQUENCY INFORMATION
S10
CLOSE PATHS
S11
GENERATE SELECTION COMMANDS BASED ON FREQUENCY CORRESPONDING TO FREQUENCY INFORMATION
S6
SWITCH INPUTS IN SELECTOR BLOCKS BASED ON SELECTION COMMANDS
S12
SWITCH INPUTS IN SELECTOR BLOCKS BASED ON SELECTION COMMANDS
S7
REOPEN PATHS
S13
REOPEN PATHS
S8
RAISE FREQUENCY OF SYNCHRONIZING CLOCK SIGNAL
S14
LOWER FREQUENCY OF SYNCHRONIZING CLOCK SIGNAL
S15
END OF PROCESSING DESIGNATED?
NO
YES
END PROCESSING

FIG. 8

HOLDING BLOCK 12-1		HOLDING BLOCK 12-2		HOLDING BLOCK 12-3		HOLDING BLOCK 12-4	
○		○		○		○	
selectA	maskA	selectB	maskB	selectC	maskC	selectD	maskD
1	1	1	1	1	1	1	1

FIG. 9

HOLDING BLOCK 12-1		HOLDING BLOCK 12-2		HOLDING BLOCK 12-3		HOLDING BLOCK 12-4	
○		×		○		○	
selectA	maskA	selectB	maskB	selectC	maskC	selectD	maskD
1	1	0	0	1	1	1	1

FIG. 10

HOLDING BLOCK 12-1		HOLDING BLOCK 12-2		HOLDING BLOCK 12-3		HOLDING BLOCK 12-4	
○		×		×		○	
selectA	maskA	selectB	maskB	selectC	maskC	selectD	maskD
1	1	0	0	0	0	1	1

FIG. 11

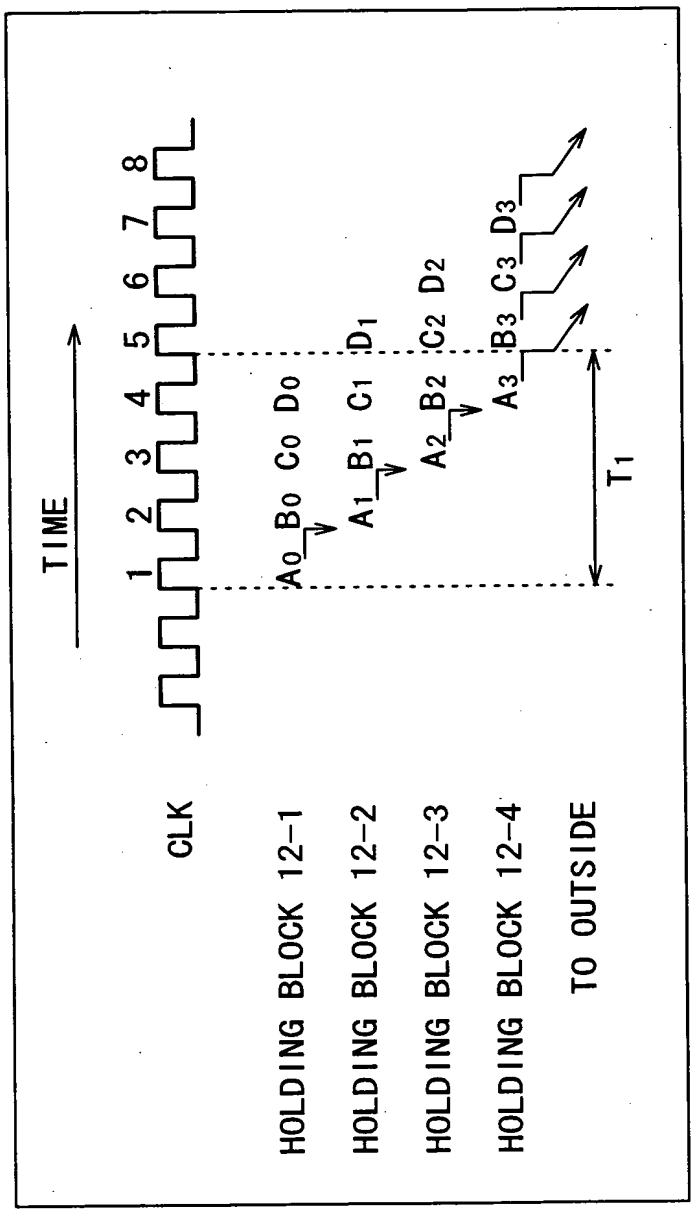
TIME
1
2
3
4
5
6
7
8
CLK
HOLDING BLOCK 12-1
HOLDING BLOCK 12-2
HOLDING BLOCK 12-3
HOLDING BLOCK 12-4
TO OUTSIDE
A0 B0 C0 D0
A1 B1 C1 D1
A2 B2 C2 D2
A3 B3 C3 D3
T1

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FIG. 12

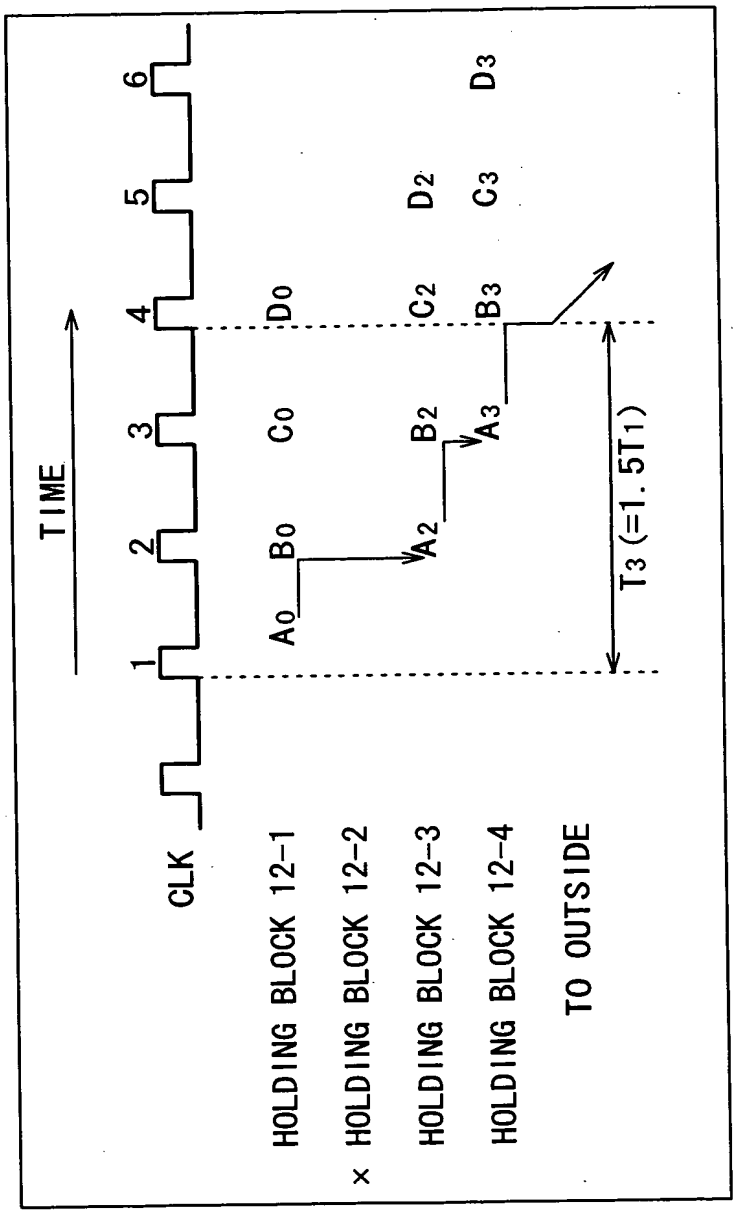

FIG. 13

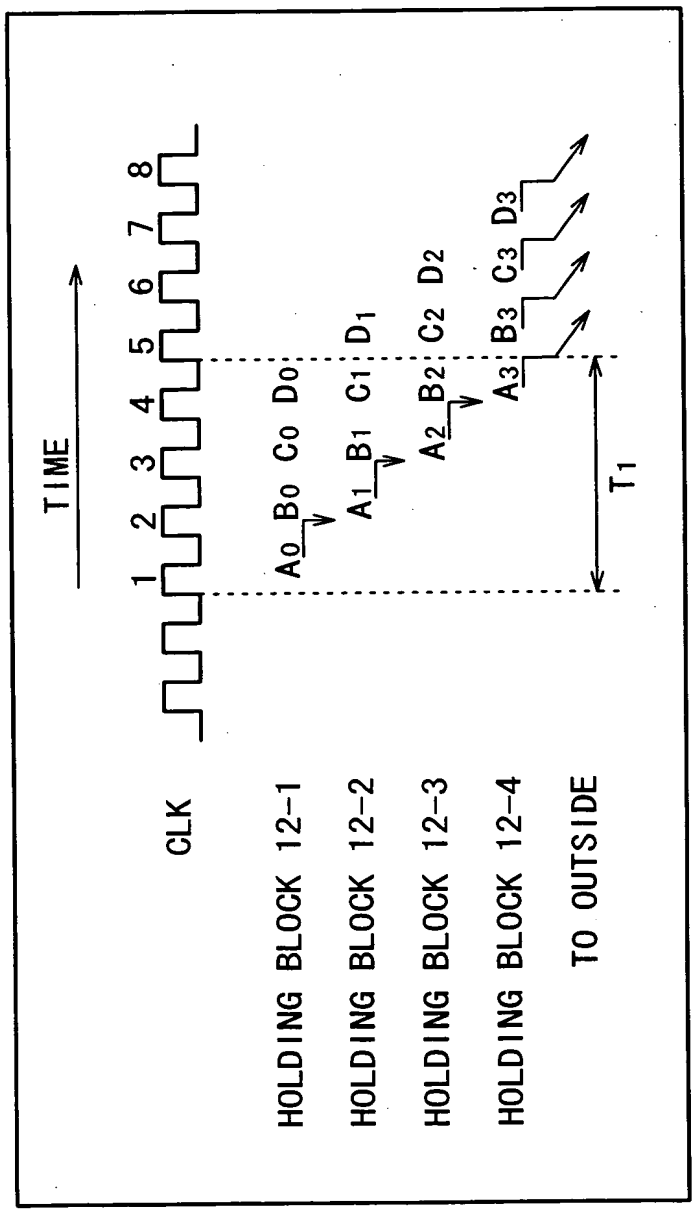
TIME
1
2
3
4
5
6
7
8
CLK
HOLDING BLOCK 12-1
HOLDING BLOCK 12-2
HOLDING BLOCK 12-3
HOLDING BLOCK 12-4
TO OUTSIDE
A0 B0 C0 D0
A1 B1 C1 D1
A2 B2 C2 D2
A3 B3 C3 D3
T1

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FIG. 14

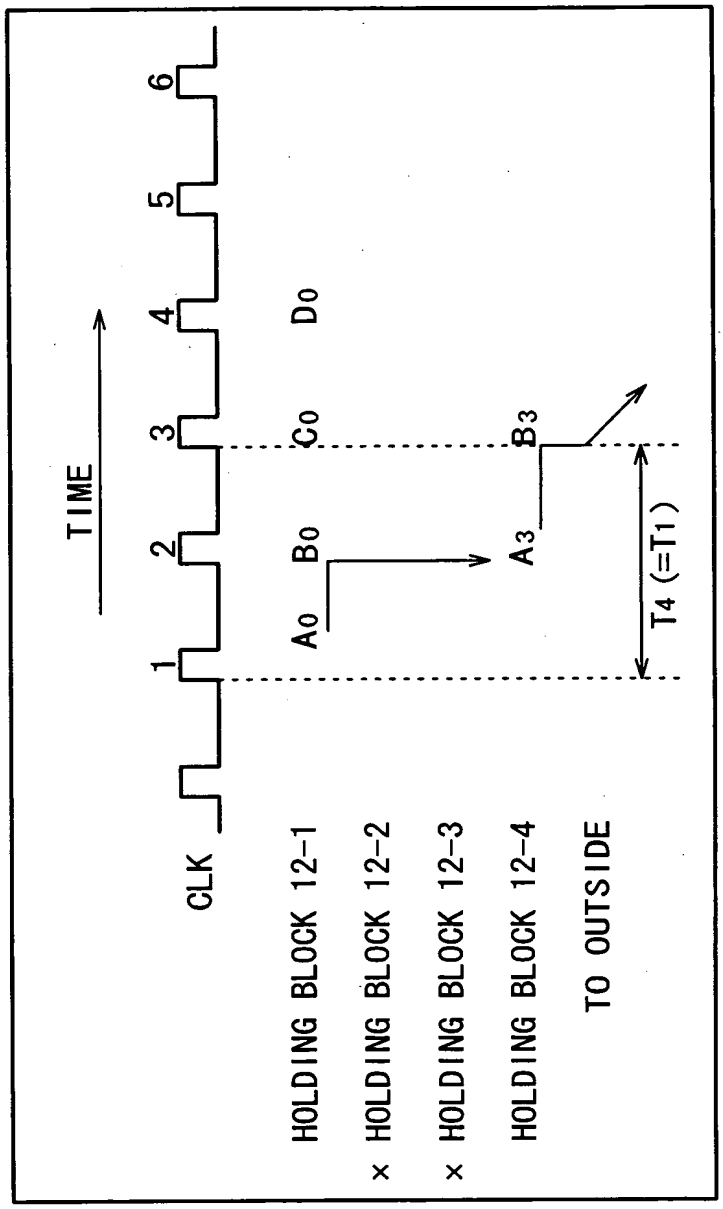
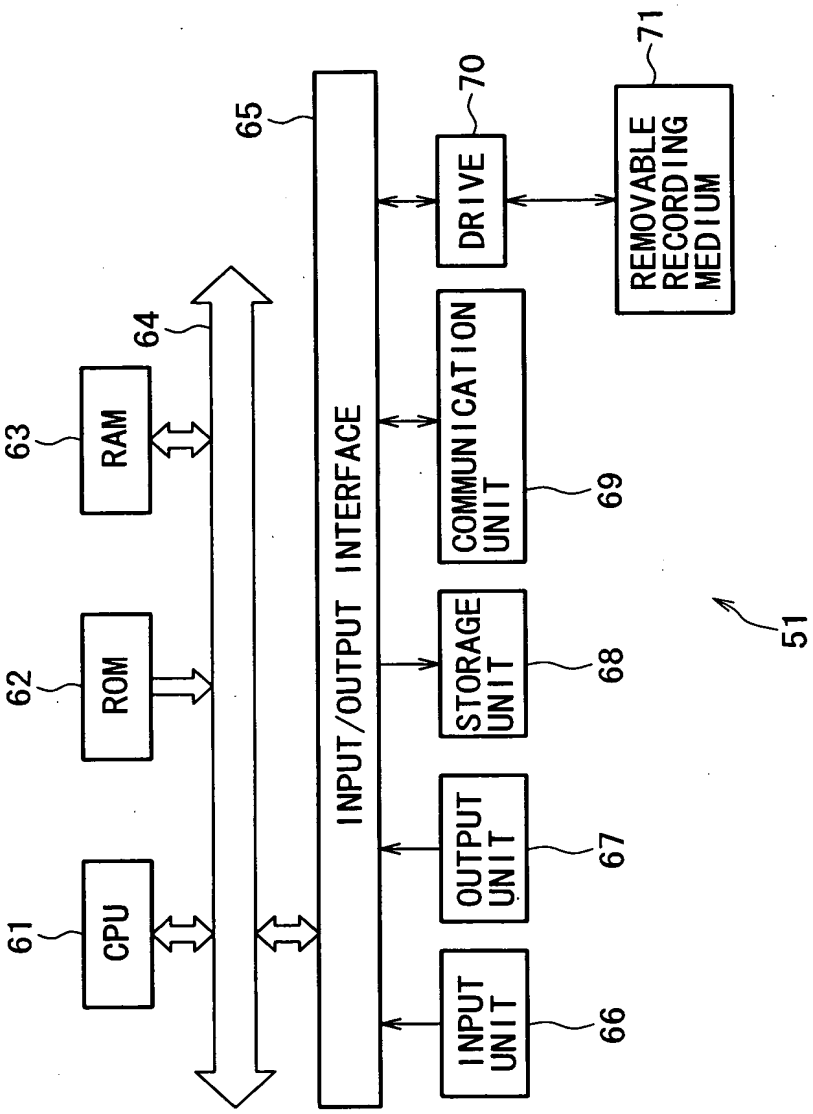


FIG. 15


CPU
61
ROM
62
RAM
63
64
65
INPUT/OUTPUT INTERFACE
INPUT UNIT
66
OUTPUT UNIT
67
STORAGE UNIT
68
COMMUNICATION UNIT
69
DRIVE
70
REMOVABLE RECORDING MEDIUM
71
51